In the Claims

A complete listing of the claims follows immediately hereinafter.

1. (withdrawn) A method for making a more uniform plasma and process in a processing chamber for treating a treatment surface of a treatment object within the chamber using an inductively coupled plasma source which produces an asymmetric plasma density pattern at the treatment surface using a slotted electrostatic shield having uniformly spaced-apart slots, said method comprising the steps of:

modifying said slotted electrostatic shield in a way which compensates for said asymmetric plasma density pattern to provide a modified plasma density pattern at said treatment surface.

2. (withdrawn) The method of claim 1 wherein the asymmetric plasma density pattern includes a first region having a reduced plasma density which is less than an average plasma density of the asymmetric plasma density pattern and wherein the step of modifying said shield includes the step of forming a modified slot pattern in a modified shield such that a first portion of the modified slot pattern adjacent to said first region includes an increased effective aperture that is greater than an average effective aperture of the overall modified slot pattern, to create a modified plasma density in said first region which is greater than said reduced plasma density.

3. (withdrawn) The method of claim 1 wherein the asymmetric plasma density pattern includes a first region having a reduced plasma density which is less than an average plasma density of the asymmetric plasma density pattern and wherein the step of modifying said shield includes the step of forming a modified pattern of openings in a modified shield such that a first portion of the modified pattern of openings adjacent to said first region includes an increased effective aperture that is greater than an average effective aperture of the modified pattern of openings, to create a modified plasma density in said first region which is greater than said reduced plasma density.

4. (withdrawn) The method of claim 3 including wherein said uniformly spaced-apart slots of said slotted electrostatic shield define a uniform slot and density and circumferentially around the slotted electrostatic shield with each slot defining a slot opening of equal area and wherein said modified shield includes a slot density of said slots adjacent to said first region that is greater than the uniform slot density.

5. (withdrawn) The method of claim 3 wherein said uniformly spaced-apart slots of said slotted electrostatic shield define a uniform slot density circumferentially around the slotted electrostatic shield with each slot defining a slot opening of an unmodified, equal area and wherein said modified shield includes a slot arrangement adjacent to said first region made of at least one modified slot having a modified slot opening defining a modified area, adjacent to said first region, that is greater than said unmodified area.

6. (currently amended) In a processing chamber that uses an inductively coupled plasma source <u>defining an axis of symmetry</u> which produces a plasma density having a given radial variation characteristic across a treatment surface of a treatment object therein using a given electrostatic shield, a method comprising ~~the steps of~~:

configuring an electrostatic shield arrangement to replace said given electrostatic shield in a way which provides for producing a modified radial variation characteristic across said treatment surface which is different than said given radial

variation characteristic and said electrostatic shield arrangement is further configured to include at least a sidewall arrangement having a shape that extends through a range of radii relative to said axis of symmetry having a modified slot arrangement that is made up of a plurality of elongated modified slots, each of which includes a length in said sidewall that extends through at least a portion of said range of radii and each of which includes a width that varies at least partially along said length for producing said modified radial variation characteristic.

7. (currently amended) The method of claim 6 including ~~the step of~~ using the electrostatic shield arrangement to produce said modified radial variation characteristic as being more constant across said treatment surface than the given radial variation characteristic.

8-9. (canceled)

10. (currently amended) The method of claim [[8]] 6 wherein said electrostatic shield arrangement is at least generally conical in configuration.

11. (currently amended) The method of claim [[8]] 6 wherein said electrostatic shield arrangement is at least generally frustoconical in configuration.

12. (currently amended) The method of claim [[8]] 6 wherein said electrostatic shield arrangement is at least generally dome-shaped in configuration.

13. (currently amended) The method of claim [[8]] 6 wherein said electrostatic shield arrangement includes a plate-like upper surface that is arranged to intersect said axis of symmetry and each of said elongated modified slots extends from the sidewall and at least partially across said plate-like upper surface.

14. (currently amended) ~~The method of claim 8 wherein configuring includes~~ In a processing chamber that uses an inductively coupled plasma source that defines an axis of symmetry and which produces a plasma density having a given radial variation characteristic across a treatment surface of a treatment object therein using a given electrostatic shield, a method comprising:

configuring an electrostatic shield arrangement to include at least a sidewall arrangement having a shape that extends through a range of radii relative to said axis of symmetry to replace said given electrostatic shield to provide for producing a modified radial variation characteristic across said treatment surface which is different than said given radial variation characteristic by arranging said electrostatic shield arrangement to include at least a first, inner shield member and a second, outer shield member, said inner shield member defining a first aperture pattern and said outer shield member defining a second aperture pattern, and supporting the outer shield member outside of and adjacent to the inner shield member and rotating the outer shield member relative to the inner shield member to cause the first aperture pattern to cooperate with the second aperture pattern in a way which provides a range in said modified radial variation characteristic across said treatment surface.

15. (original) The method of claim 14 including a rotation arrangement for sensing the modified radial variation characteristic and for rotating one of the inner shield member and the outer shield member responsive to a sensed value of the

modified radial variation characteristic.

16. (original) The method of claim 14 wherein said electrostatic shield arrangement is configured such that each of the inner shield member and the outer shield member are frustoconical in configuration, said inner shield member including an inner shield sidewall and said outer shield member including an outer shield sidewall such that the inner shield sidewall and the outer shield sidewall are adjacent to one another.

17. (currently amended) ~~The method of claim 8 wherein configuring includes~~ In a processing chamber that uses an inductively coupled plasma source that defines an axis of symmetry and which produces a plasma density having a given radial variation characteristic across a treatment surface of a treatment object therein using a given electrostatic shield, a method comprising:

configuring an electrostatic shield arrangement to include at least a sidewall arrangement having a shape that extends through a range of radii relative to said axis of symmetry to replace said given electrostatic shield to provide for producing a modified radial variation characteristic across said treatment surface which is different than said given radial variation characteristic by arranging said electrostatic shield arrangement to include at least a first shield member and a second shield member, said first shield member defining a first aperture pattern, and supporting said second shield member outside the first shield member for linear movement in relation to the first shield member in a way which produces a range in said modified radial variation characteristic across said treatment surface.

18. (original) The method of claim 17 wherein said first shield member is frustoconical in configuration having a narrowed end and said second shield member is supported for movement toward and away from the narrowed end of the first shield member.

19. (original) The method of claim 18 including forming said narrowed end having a through opening and said second shield member moves toward and away from said through opening.

20. (original) The method of claim 18 wherein the frustoconical configuration of the first shield member includes a conical sidewall having an upper peripheral edge and a top wall having an outer peripheral edge that is connected with the upper peripheral edge of the conical sidewall.

21. (original) The method of claim 20 wherein said conical sidewall and said top wall cooperate to define an overall aperture pattern that carries in a continuous manner from the conical sidewall to the top wall.

22. (original) The method of claim 21 including forming said overall aperture pattern as a circumferential arrangement of wedge-shaped apertures each defined as having a base edge in the conical sidewall and an apex in said top wall.

23. (currently amended) ~~The method of claim 8 wherein configuring includes~~ In a processing chamber that uses an inductively coupled plasma source that defines an axis of symmetry and which produces a plasma density having a given radial variation characteristic across a treatment surface of a treatment object therein using a given electrostatic shield, a method comprising:

configuring an electrostatic shield arrangement to include at least a sidewall arrangement having a shape that extends through a range of radii relative to said axis of symmetry to replace said given electrostatic shield in a way which provides for producing a modified radial variation characteristic across said treatment surface which is different than said given radial variation characteristic by arranging said electrostatic shield arrangement to include at least a first shield member and a second shield member, said first shield member defining a first aperture pattern and said second shield member defining a second aperture pattern, and supporting said second shield member outside the first shield member for rotational movement about said axis of symmetry and in relation to the first shield member in a way which produces a range in said modified radial variation characteristic across said treatment surface by rotating the second shield member relative to the first shield member.

24. (original) The method of claim 23 wherein said first shield member is frustoconical in configuration having a conical sidewall and a narrowed end that is closed by an upper surface, and said conical sidewall and said upper surface cooperate to define said first aperture pattern as a plurality of spaced apart openings that carry in a continuous manner from the conical sidewall into the upper surface, and said second shield member is formed to include a major surface that is arranged in a confronting relationship with said upper surface of the first shield member, said major surface defining a plurality of slots, as the second aperture pattern, complementing said spaced apart openings, as defined in the upper surface of the first shield member, and arranging the second shield member for rotation about said axis of symmetry such that rotation of the second shield member relative to the first shield member modifies said radial variation characteristic.

25. (original) The method of claim 24 wherein said spaced apart openings of the first aperture pattern and said slots of the second aperture pattern are each configured as wedge-shaped such that each of the openings in the first shield member includes a base edge in the conical sidewall and an apex in said upper surface.

26. (original) The method of claim 24 including forming said second shield member to include a skirt that extends from an outermost edge of said major surface in a confronting relationship with said conical sidewall of the first shield member and at least a portion of said second aperture pattern is defined in said skirt.

27. (currently amended) The method of claim [[1]] 6 including using a semiconductor wafer as said treatment object.

28-51. (canceled)